SPRINGBORN DAM REMOVAL

SCANTIC RIVER, CONNECTICUT

Application for NOAA Coastal and Marine Habitat Restoration Project Grants

Under the American Recovery and Reinvestment Act of 2009

1. Project Summary

Applicant: Connecticut Department of Environmental Protection
Bureau of Water Protection and Land Reuse, Inland Water Resources Division
79 Elm Street, Hartford, CT 06106-5127

Project Title: Springborn Dam Removal on the Scantic River, Enfield, CT

Site Location: Scantic River, Enfield, CT Lat. 41^0 58' 58" N
Long. 72^0 31' 6" W

Land Owner: State of Connecticut Department of Environmental Protection

On-the-Ground Implementation Start Date: On or about July 30, 2009

Number and types of jobs created or maintained and anticipated duration:
Near-term: Estimated to create or maintain 19 construction, engineering, and supporting services jobs using a standard estimate of $100,000 per full time annual equivalent for that portion of the project associated with the engineering and construction, and $400,000 per full time annual equivalent for monies spent on removal and disposal of sediments throughout the project phase (estimated to be 18 months from initiation).
Long-term: Economic value will accrue to local business and residents from improved environmental quality and recreational opportunities associated with removal of contaminated sediments, removal of an unsafe dam, and improved opportunities for fishing, boating and passive outdoor recreation.

Coastal and marine habitats to benefit from the project: The removal of Springborn Dam, an in-stream barrier to fish passage on the Scantic River, will restore access to 2.5 miles of habitat for spawning, juvenile rearing and growth of American shad, blueback herring, alewife and American eel, four species of regional and national significance. Once Springborn Dam is removed, the agency will focus efforts at providing fish passage at Somersville Mill Pond Dam which, once achieved, will restore access to an additional 27.5 miles of riverine habitat. In addition to diadromous species, removal of Springborn Dam will reconnect a large population of native brook trout with upstream habitat and spawning areas. The Scantic River watershed (114 square miles) joins the mainstem Connecticut River approximately 62 miles upstream from Long Island Sound and approximately two miles upstream of the head of tide (Figures 1 and 2). The Connecticut River supports the largest runs of diadromous fish in all of Southern New England.

Project Scope: The removal of Springborn Dam represents a mid-scale project that will yield significant ecological and economic benefits. Preliminary design work is complete and the scope of sediment removal has been evaluated. The project applicant, State of Connecticut DEP, owns the dam. Major tasks to be completed include final engineering for sediment removal and dam

removal and for building and bank stabilization. We expect that actual sediment removal will begin concurrent with engineering for dam removal. This will enable the project to proceed in a timely manner. Post-construction activities will include qualitatively assessing the number of adult American shad and alewife passing upstream of the former dam site to the next barrier. Adult American shad and alewife will be transplanted upstream of the dam removal site and into Somersville Pond to accelerate the pace of re-colonization. Electrofishing data will be collected to monitor the expansion of brook trout and American eel populations.

Project Output/Outcomes: Removal of Springborn Dam will restore access to 2.5 miles and will open up the possibility of access to 27.5 additional miles of historical spawning and juvenile rearing and growth habitats for diadromous species. Targeted diadromous species include American shad, river herring (blueback herring and alewife), and American eel. Enhancing these populations will have indirect ecological benefits for other species such as osprey, bald eagle, striped bass, bluefish, seals, porpoises, colonial nesting birds, otter, and mink. Furthermore, many freshwater mussels rely on diadromous fish to distribute them to upper portions of watersheds. Dams have blocked the dispersal of mussels to these areas and the removal of dams helps to reverse this trend.

Project Timeline: Project may begin approximately 90 days following issuance of the award (engineering and sediment removal to occur simultaneously) and is expected to be completed within 18 months of initiation. This can be accomplished by identifying the composite of the sediments to be removed within the first 30 days of award, allowing a contract for sediment removal to be initiated while the dam design is underway and permits for the dam removal are obtained. This prospective timeline would allow the dam removal to actually take place in the summer/fall of 2010, with completion by the end of the year.

Permits and Approvals: Preliminary design work has been completed. We do not expect any difficulties in issuance of applicable permits or completion of NEPA compliance analysis. In terms of State permits, we plan on asking for permits in two phases. The first phase will be a request for permits to dredge the pond. This will involve obtaining a state inland wetlands permit since the state will be managing the project. The second phase will be a request for a dam safety permit to actually remove the dam and stabilize the dam site. Depending on the methodology of sediment dredging and dam removal, an ACOE 404 permit and Water Quality 401 permit will most likely be required. The fisheries/habitat benefit will help justify the need for this project, and with coordination during the design phase, it should be a 3-4 month turnaround time to obtain the federal permits for sediment removal. As soon as all information is collected about the quality of and disposal methodology for the pond sediments, the DEP plans on proceeding with the permitting phase for the sediment removal process regardless of the disposition of this grant application.

Federal Funds Requested and Non-Federal Match Anticipated:

Federal Funds Requested:	$3,000,000
State Match Funds Available:	$1,000,000

Overall Project Cost: $4,000,000

2. Project Narrative

Importance and Applicability

Relationship to ARRA:

Objectives:

1) Short term
    a. Create or maintain 19 construction related jobs (Full Time Equivalent)
2) Long term
    a. Increase socioeconomic benefit as a product of ecological restoration

Contracting and implementation for sediment disposal, contracting for engineering, and contracting for bank and building stabilization and dam removal will provide the detailed information on number, type and duration (in labor hours) of jobs created or maintained from the project. Using a relative value of 1 job per $100,000 spent on engineering and construction, and an estimate of 1 job per $400,000 spent on sediment removal, we estimate 19 jobs of one-year equivalent duration will be created by this project. Once bids are open for each of the various stages, DEP will provide specific details on the number of jobs created or maintained, as required under the ARRA for a NOAA award agreement.

All contractors to the State are required to abide by Connecticut's Affirmative Action and Equal Opportunity employment policies and must "implement, monitor and enforce this [Connecticut's] affirmative action policy statement and program in conjunction with all applicable Federal and state laws, regulations and executive orders."

The restoration of diadromous fish populations is expected to generate long term increases in socioeconomic benefit including increased recreational use by anglers, boaters and passive recreational users. Increases in fish populations are expected. Most notable are expected increases in American shad, river herring, eels and brook trout upstream of the existing dam site.

The removal of contaminated sediment and a dam in disrepair is expected to significantly increase the value of properties located upstream (improved environmental quality), downstream (by reducing the risk of flooding due to failure of the dam), and adjacent to the project site.

Relationship to NOAA's Mission:

Objectives:

1) Short term
    a. Restore access to 2.5 miles of historical diadromous fish habitat for spawning, juvenile rearing and growth, and adult passage.

2) Long term
    a. Provide potential to restore access to an additional 27.5 miles of habitat.
    b. Once passage is provided at both dams: Increase adult American shad population size by 3,000.
    c. Once passage is provided at both dams: Increase adult river herring population size by 30,000

The removal of Springborn Dam, an in-stream barrier to diadromous fish passage on the Scantic River, will restore access to approximately 2.5 miles of habitats for American shad, blueback herring, alewife and American eel, four NOAA trust species of regional and national significance. The Scantic River watershed (114 square miles) joins the mainstem Connecticut River 62 miles upstream from Long Island Sound, and approximately 2 miles upstream of the head of tide (Figures 1 and 2). The Connecticut River supports the largest runs of diadromous fish in all of Southern New England.

"Riverine migratory corridor(s)" is a class of essential habitat for diadromous fishes; those that move between marine and fresh waters for purposes of reproduction. This class of habitat supports adult spawning, juvenile growth, and adult and juvenile migratory pathways. The proposed project will re-connect existing fish runs to historically available habitats.

The Scantic River historically supported significant native diadromous fish runs that included Atlantic salmon, American shad, alewife, blueback herring, sea lamprey, and American eel. Scanticook Indians fished for anadromous fish among the ledges in Scitico and Hazardville. In the book "The History of Wilbraham" [MA] (1913), author Chauncey Peck describes both salmon and shad fisheries in the Scantic River. Research done by local Hampden historian William E. Meuse indicates that such runs occurred in Hampden, which was then the southern portion of Wilbraham, MA. This town is approximately 8.5 miles upstream of the Springborn Dam. As late as the 1970s, the Scantic was known to host a robust shad run, which has dwindled in intervening years. Sea lamprey still ascend to Springborn Dam and local residents report that small numbers of alewives are seen at the base of the dam in most years.

Diadromous fish species are NOAA trust species and run sizes are linked to the amount of available habitat. As the amount of accessible habitat increases, so does the production of juvenile fish and, ultimately, the number of adult fish that return to the river (in the case of the anadromous species). By removing the Springborn Dam, the targeted species will be able to access the next 2.5 miles of the river for the first time in 167 years. The next barrier is the relatively low Somerville Pond Dam (aka Mill Pond Dam), which is owned by the CT DEP (Figure 3). If Springborn Dam is removed, the CTDEP would anticipate applying for future grants to install a Denil fishway at the Somersville Pond Dam to open up the rest of the river, about 6 miles on the Scantic (including the 41 acre headpond) and 21.5 miles on the tributaries (Table 1). There are only two major dams in the rest of the watershed within Connecticut, small

dams on Wrights Brook and Gulf Stream, both tributaries. All of the rest of the streams in Table 1 are undammed.

The opportunity to open up so many miles with only two fish passage projects is unusual. The habitat upstream of Somersville Pond Dam is flat and meandering, which is excellent shad and river herring habitat. No attempt has been made to quantify the available habitat but it appears likely that the river could support annual runs of a few thousand American shad, perhaps tens of thousands of river herring and undetermined numbers of sea lamprey and American eel. Just the Somersville Dam headpond alone could be expected to support 24,000 alewives. The re-establishment of these populations will have many indirect ecological benefits as predators follow the increased forage base up the watershed and increase their populations. These include osprey, bald eagle, striped bass, colonial nesting birds, otter, and mink. Futhermore, many freshwater mussels rely on diadromous fish to distribute them to upper portions of watersheds. Since the construction of dams, many species of mussels have disappeared from upper watersheds and the removal of the Springborn Dam will reverse this trend.

Another notable fish species present below the dam is the brook trout, a native species now the focus of a major multi-state conservation initiative (Eastern Brook Trout Joint Venture). While this species is not a trust species for the NOAA, it is a priority for the U.S. Fish & Wildlife Service, the CT DEP, and other States in the Northeast. Snorkeling and electrofishing surveys below the Springborn Dam reveal a large population of wild, naturally-reproducing brook trout. There are no brook trout downstream of Powder Hollow (a mile downstream of the dam) and no brook trout between the Springborn and Somersville Pond dams. There are brook trout populations in the mainstem Scantic and most tributaries upstream of the Somersville Pond dam. Removing the Springborn Dam will restore suitable habitat for brook trout upstream of the dam and eventually allow the Scitico population to reconnect with the population in the headwaters.

The removal of the Springborn Dam will allow a much broader suite of fish to pass upstream than any fishway could allow. We will not have to make decisions on how to design a fishway and what species need to be targeted. Whatever species are present and were able to pass historically will be able to pass once again. Furthermore, the dam is in a gorge lined on one side by the mill and the other side by near vertical rock walls. It would be a very difficult location to build and operate a fishway.

Not only do the dam removals and fish passage structures provide for fish migration and greater recreational opportunities, but those actions also help improve water quality by increasing velocity and allowing for more natural aeration and pollutant attenuation. Great improvements, substantiated by monitoring, have been seen in aesthetics, clarity, ammonia levels, dissolved oxygen concentrations, and other chemical constituents.

Lasting Benefits:

Once Springborn Dam is removed and passage is secured at the upstream Somersville Pond dam, the targets for diadromous species will include American shad (~3,000 returning adults), river herring (blueback herring and alewife, collectively; ~30,000 returning adults), and American eel (restoration goal not quantified). Eastern brook trout within the watershed will once again be permanently re-connected.

The physical and ecological improvements to the Scantic River resulting from removal of the dam and contaminated sediments are lasting and permanent, requiring only the maintenance of existing water quality standards. Reconnecting remnant runs of diadromous fishes to historical upstream habitats is expected to foster the lasting restoration of thriving and self-sustaining populations. Targeted fisheries management programs to expedite and ensure continued value to the Springborn Dam removal project, include transplanting prespawn American shad and alewife and scheduled stream sampling (electrofishing) to document changes in American eel and Eastern brook trout populations.

Citizen groups and communities have played a key role in habitat conservation and restoration projects along the Scantic River. Advocacy groups have conducted river cleanups, fish stocking, revegetation projects, monitoring, and "on the water" events such as canoeing and kayaking. The removal of Springborn Dam will provide permanent recreational passage for kayakers and canoeists.

Technical/Scientific Merit:

Implementation Plan:

Springborn Dam is 18 feet high and made of quarried stone, concrete, and wood, reflecting various generations of dams and likely previous repairs. The dam was built on top of a bedrock outcrop, but the height of the ledge is modest and not sufficient to block fish passage. This dam once powered a gristmill and sawmill but later was raised to power a mill to recycle wool to provide to carpet mills. To the north of the dam is the former mill, a sprawling brick structure that houses STR, Inc., which conducts quality assurance testing and compliance monitoring for a variety of industries. It does not use the dam or the headpond. There is no water use at the site and all streamflow spills over the spillway. To the south is open space (Figure 2). American eel is the only fish species currently capable of migrating past this dam, and that migration is likely to be greatly impeded. Electrofishing data show lower densities of eels upstream of the dam compared to downstream of the dam.

The privately-owned dam had been under order for repairs and through legislative action, was transferred to CT DEP ownership in 1998. The dam was further damaged by floods which occurred in October 2005. The CT DEP subsequently undertook two engineering studies to determine the best course of action to make this structure safe. Options include repairing the dam (removing the top wooden portion) or completely removing the dam and the accumulated sediment. Cost estimates contained herein are from the most recent study by Fuss & O'Neill. Repairing the dam would be much less expensive but would result in the need to maintain a superfluous dam, would not provide fish passage, would not allow for unobstructed paddling on a popular canoeing river, would not remove lightly contaminated sediment from the river, and would not provide as many jobs as would dam removal.

Fuss & O'Neill Engineers have been under contract for 8 months with the DEP and American Rivers to study the breach option. The contract covers investigating the viability of removing the sediments and restoring the river to its natural state.

In terms of State permits, a state dam safety permit will be required (which in CT negates the need for obtaining a local/state inland wetlands permit and a diversion permit). Depending on the methodology of sediment dredging and dam removal, an ACOE 404 permit and Water Quality 401 permit will most likely be required. The fisheries/habitat benefit will justify the need for this project, and with coordination during the design phase, it should be a 4-6 month turnaround time to obtain the necessary permits.

Sediment removal can commence concurrent with engineering for removal of the dam by identifying the composite of the sediments to be removed within the first 30 days of award, allowing a contract for sediment removal to be initiated while the dam design is underway and permits for the dam removal are obtained. This prospective timeline would allow the dam removal to actually take place in the summer/fall of 2010, with completion by the end of the year.

Both DEP and a selected management consultant to oversee the construction contractor(s)' activities will maintain oversight and day-to-day approval of activities to ensure compliance with the contract conditions and requirements, that performance measures, including schedules, are met and that major targets for construction and performance standards are incorporated in quality management plans and met. Performance bonds are required as a standard contractual requirement in Connecticut.

Operation and Maintenance: There will not be any ongoing operation and maintenance costs once removal of contaminated sediment and the structure itself is complete.

Socioeconomics: Contracting and implementation for sediment disposal, contracting for engineering, and contracting for bank and building stabilization and dam removal will provide the detailed information on number, type and duration (in labor hours) of jobs created or

maintained from the project. Using a relative value of 1 job per $100,000 spent on engineering and construction, and an estimate of 1 job per $400,000 spent on sediment removal, we estimate 19 jobs of one-year equivalent duration will be created by this project. Once bids are open for each of the various stages, DEP will provide specific details on the number of jobs created or maintained, as required under the ARRA for a NOAA award agreement.

All contractors to the State are required to abide by Connecticut's Affirmative Action and Equal Opportunity employment policies and must "implement, monitor and enforce this [Connecticut's] affirmative action policy statement and program in conjunction with all applicable Federal and state laws, regulations and executive orders."

The removal of Springborn Dam and restoration of diadromous fish populations is expected to generate long term increases in socioeconomic benefit including increased recreational use by anglers, boaters and passive recreational users. All increases in recreational activity and aesthetic value will be accompanied by increases in net economic value to the local community (i.e. Consumer Surplus). Increases in fish populations are expected. Most notable are expected increases in American shad, river herring, eels and brook trout upstream of the existing dam site. Although the Scantic River would be the beneficiary of these ecological and socioeconomic benefits, whenever diadromous fish are involved, the impact is regional since people have proven a willingness to drive beyond their home community to access diadromous fish resources. This is particularly true for American shad, for which there are only a handful of streams in Connecticut that still support runs.

The removal of contaminated sediment and a dam in disrepair is expected to significantly increase the value of properties located upstream (improved environmental quality), downstream (by reducing the risk of flooding due to failure of the dam), and adjacent to the project site.

Short term performance parameters will involve monitoring the number of hours by NAICS job code, with the total compared to projected job creation/retention targets.

Long term performance parameters will involve qualitative assessment changes in abundance of American shad and river herring. Quantitative assessments will include electrofishing to determine increases in the abundance and distribution of American eel and Eastern brook trout.

Technical Feasibility: This project has a very high potential for restoring a key riverine migratory corridor since dam removal will allow passage of the full suite of native migrants that were able to pass upstream prior to European colonization. Moreover, the removal of the sediment will improve habitat quality both upstream and downstream of the dam site and the elimination of the pond will improve habitat quality in terms of dissolved oxygen and elevated temperature. The fact that the mouth of the Scantic is within a mile of the head-of-tide and that

the Springborn Dam is at a very low elevation increases the potential benefit to diadromous fish species.

The potential that this project will lead to sustainable and lasting benefits is very high due to the presence of high quality habitat and the opportunity for natural reproduction of native species. The presence of sustained, long-term populations of the targeted species in the Connecticut River increases the likelihood that restored runs up the Scantic will also be sustainable. With only one mainstem dam (low) and no hydroelectric projects, the survival rates of young-of-year should be high.

The State of Connecticut has been interested in breaching and or modifying this dam since it became the owner in 1998. Part of Fuss & O'Neill's task as our engineer, has been to investigate the potential constraints/issues related to dam removal. All of the constraints have been defined and have engineering solutions, but the cost to solve these issues was a problem for the Department. The constraints that need to be addressed are the cost of sediment removal and disposal, the fact that a well field exists in the upstream reaches of the impoundment formed by the Springborn Dam, the increase in scour potential at a railroad bridge in the impoundment area, and the potential instability of the adjacent building after the pond is dewatered. All of these problems can be overcome. The dam was built in a gorge, which made it a great place to build a dam and to minimize the size of the dam while maximizing the depth of water held for water power. This gorge setting will make removal work difficult, but not impossible. The dam can be accessed from the river channel on the downstream side. The impoundment can be accessed from the broader floodplain 700' upstream of the dam. This access point upstream of the dam is also the head of the sediment deposits. Again, all of these issues can be overcome with technical engineering solutions.

Overall Qualifications of Applicants

Applicant Capacity and Knowledge:

The Inland Water Resources (IWRD) staff of DEP is very familiar with dam repair/dam removal projects. The two key staff persons working on this project have over 25 years experience each in dam and water resources construction activities. The staff has repaired over 50 state owned dams, and 40 municipally owned dams. The staff has a great ability to work with contractors to insure smooth, well planned sequence of construction. The staff is also very familiar with water control and scheduling of site activities on rivers with larger drainage areas. Our greatest strength is handling changes to the contract. Our site work experience is vast and the IWRD staff with the help of the consultant engineer can almost always look at a problem or unforeseen site condition and immediately select an appropriate course of action. We feel very confident

that we will be able to have full control of the contractor and the site work, which will enable us to get the project constructed on time and on budget.

Assisting Inland Water Resources staff will be staff from the Inland Fisheries Division (IFD), in particular Steve Gephard, the Supervisor of the IFD's Diadromous Fish Program. Steve is an expert on fish passage issues with over 30 years of experience with fish passage and diadromous fishes. He has been involved with over 40 projects to construct or repair fishways in Connecticut and has additional experiences in other states and Europe. He has extensive experience dealing with designs, permitting, and contractors relating to fish passage projects. He has assisted in teaching courses on fish passage for the U.S. Fish & Wildlife Service, the American Fisheries Society, and the University of Wisconsin. He serves on numerous regional committees that deal with fish passage and diadromous fishes.

Administrative Resources and Capabilities:

The CTDEP is a professional state agency with full administrative, legal, information technology, and clerical support services. In addition to the primary staff identified in the previous section, there are other staff who will assist with the administrative duties and in the implementation of this project, including staff in the Hartford, Old Lyme, and Portland offices.

Project Costs

***Costs*:** Implementation of this project is expected to cost up to $4,000,000, with budget details provided below. DEP will not be charging any staff time to this effort, and has up to $1,000,000 available in match if required. Detailed bid specifications will be made available upon request, and DEP will keep NOAA apprised of the final RFP and bid award, should the project be funded. Final bids will determine actual expenditure and it is DEP's intent to use the full federal award and supplement with state funds to the extent necessary. DEP will also use state funds for any costs deemed ineligible by NOAA upon final approval of the project and bid cost.

Budget Details:

Cost Estimates – Springborn Dam Removal Project

Category	Cost	Cumulative
Site Preparation, Excavation, Material Removal	$2,765,780	$2,765,780
Environmental Control	$25,000	$2,790,780
Sand, Aggregate, Fill	$10,000	$2,800.780
Construction Materials	$61,500	$2,862,280
RipRap, Armoring, Habitat Features	$85,925	$2,948,205

Grading, Fencing, Safety	$7,000	$2,955,205
Paving, Sidewalks (Porous)	-0-	$2,955,205
Native Plantings, Landscaping	$3,000	$2,958,205
Logistics	$45,000	$3,003,205
Construction	$792,295	$3,795,500
Signage, Lighting, Fixtures	$9,000	$3,804,500
Contract, Management & Engineering Support	$195,500	$4,000,000
TOTAL	$4,000,000	$4,000,000

Matching Contributions: As noted above, DEP has up to $1,000,000 available in state funds to be used to supplement the $3,000,000 in federal funds if awarded by NOAA. Details will be provided when the project is bid and during contract development. Not indicated are staff resources to administer the grant, oversee the construction, and follow up monitoring.

Outreach and Education

Public Outreach: Information about the project will be distributed in various forms: broadcast via public presentations (e.g., the Connecticut Conference on Natural Resources), the DEP Webpage, the Connecticut Wildlife magazine, and in DEP newsletters (e.g., Sound Outlook). The CTDEP would partner with NGOs such as the Connecticut River Watershed Council, Scantic River Watershed Association, and American Rivers (all which support this project), to photo-document the removal project and the subsequent restoration/recovery of the river. All parties would use this and other information as part of their outreach to their constituencies (presentations, websites, etc.) and as a case study to help guide future projects. This could be one of the largest modern dam removals in Connecticut and the experience will be helpful when considering others. The CTDEP would look to partner with the SRWA to identify an appropriate nearby location where an informational kiosk could be erected to explain the project and acknowledge the funders.

3. Budget Justification

The DEP has received an opinion of probable costs from their consultant based on analysis and testing performed to date. This cost estimate is weighted heavily on the cost of sediment removal and disposal. The estimate for sediment removal and disposal is $3.3 million. On our cost estimate, this cost is broken down into "dredge impoundment and dewater material" at $440,000, "Stockpile, onsite hauling, loading for offsite disposal" at $491,000, "Haul to offsite Location" at $721,000, and "Disposal fees" of $1,642,000. This cost is shown on the preceding chart broken into two items, labeled "excavation, material removal" and "Construction" The other portions of the projects that are worthy of note are the engineering/materials testing during

and prior to construction at $200,000, the water handling at approximately $110,000, and the actual removal of the dam at approximately $150,000.

Besides the sediment removal aspects of this budget proposal, the dam removal will leave piers of an upstream railroad bridge exposed to scour for the first time in 50 years. This will take some design and construction effort in order to insure that the piers are not undermined. Another unusual but costly component of the dam is the stabilization of the building adjacent to the dam and impoundment. The foundation of this building has not been previously exposed to the freeze thaw cycle since it was always below the ponds water surface. This foundation must be inspected and reinforced after the dam removal to insure that the building foundation is not negatively affected by the project.

Oversight of contracting and engineering services will be provided by DEP within the Inland Water Resources Division of the Bureau of Water Protection and Land Reuse, also the applicant. For a project of this size, DEP also plans to contract for site management services to oversee day to day activities and to bring any change orders or other issues to the attention of DEP. DEP's Inland Fisheries Division will provide scientific and technical oversight, and be responsible for assessment and monitoring follow up, as described in this application.

LIST OF TABLES AND FIGURES (see SUPPLEMENTAL PDF FILE FOR TABLE & FIGURES)

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SCANTIC RIVER, CONNECTICUT

Application for NOAA Coastal and Marine Habitat Restoration Project Grants
Under the American Recovery and Reinvestment Act of 2009

3. Budget Justification

Project Overview

The removal of Springborn Dam on the Scantic River (Enfield, CT), will restore access to 2.5 miles of habitat for spawning, juvenile rearing and growth of American shad, blueback herring, alewife and American eel, four species of regional and national significance. Once Springborn Dam is removed, the agency will focus efforts at providing fish passage at Somersville Mill Pond Dam which, once achieved, will restore access to an additional 27.5 miles of riverine habitat.

The removal of Springborn Dam represents a mid-scale project that will yield significant ecological and economic benefits. Preliminary design work is complete and the scope of sediment removal has been evaluated. The project applicant, State of Connecticut DEP, owns the dam. Major tasks to be completed include final engineering for sediment removal and dam removal and for building and bank stabilization. We expect that actual sediment removal will begin concurrent with engineering for dam removal. This will enable the project to proceed in a timely manner. Post-construction activities will include qualitatively assessing the number of adult American shad and alewife passing upstream of the former dam site to the next barrier. Adult American shad and alewife will be transplanted upstream of the dam removal site and into Somersville Pond to accelerate the pace of re-colonization. Electrofishing data will be collected to monitor the expansion of brook trout and American eel populations.

Total Cost

Implementation of this project is expected to cost $4,000,000, with budget details provided below. DEP will not be charging any staff time to this effort, and has up to $1,000,000 available in match if required (approved bond funds). The entire project cost will be dedicated to sediment and dam removal and related activities, including technical and engineering/design services. Detailed bid specifications will be made available upon request, and DEP will keep NOAA apprised of the final RFP and bid award, should the project be funded. Final bids will determine actual expenditure and it is DEP's intent to use the full federal award and supplement with state funds to the extent necessary. DEP will also use state funds for any costs deemed ineligible by NOAA upon final approval of the project and bid cost.

Budget Details: All costs will be contractual.

Cost Estimates – Springborn Dam Removal Project		
Category	Cost	Cumulative
Site Preparation, Excavation, Material Removal	$2,765,780	$2,765,780
Environmental Control	$25,000	$2,790,780
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Grading, Fencing, Safety	$7,000	$2,955,205
Paving, Sidewalks (Porous)	-0-	$2,955,205
Native Plantings, Landscaping	$3,000	$2,958,205
Logistics	$45,000	$3,003,205
Construction	$792,295	$3,795,500
Signage, Lighting, Fixtures	$9,000	$3,804,500
Contract, Management & Engineering Support	$195,500	$4,000,000
TOTAL	$4,000,000	$4,000,000

Total NOAA Project Costs

This proposal requests $3,000,000 in federal funds from NOAA under the ARRA of 2009. All of the NOAA funds will be used for sediment and dam removal and related activities, and will be drawn ahead of matching funds unless there are activities NOAA identifies as ineligible for federal stimulus funds. In those cases, state matching funds will be substituted. In the bidding specifications, DEP will request that "green practices" be used to the extent possible, including the use of native vegetation for site landscaping and stabilization.

Non-Federal Matching Share

As noted above, DEP has up to $1,000,000 available in state funds to be used to supplement the $3,000,000 in federal funds if awarded by NOAA. Details will be provided when the project is bid and during contract development. Not indicated are staff resources to administer the grant, oversee the project, and follow up with required monitoring and the planned transplanting of American shad and river herring. These activities will involve staff from both the Inland Water Resources Division and Inland Fisheries Division within DEP.

Additional Financial Justification

Springborn Dam was transferred to CT DEP ownership by legislative action in 1998. Prior to this, the privately-owned dam had been under order for repairs. The dam was further damaged

by floods in October 2005. The CT DEP subsequently undertook two engineering studies to determine the best course of action to make this structure safe. Options include repairing the dam (removing the top wooden portion) or completely removing the dam and the accumulated sediment. Fuss & O'Neill Engineers have been under contract for 8 months with the DEP and American Rivers to study the breach option. The contract covers investigating the viability of removing the sediments and restoring the river to its natural state. Cost estimates contained herein are from the most recent study by Fuss & O'Neill. Repairing the dam would be much less expensive but would result in the need to maintain a superfluous dam, would not provide fish passage, would not allow for unobstructed paddling on a popular canoeing river, would not remove contaminated sediment from the river, and would not provide as many jobs as would dam removal.

The DEP has received an opinion of probable costs from their consultant based on analysis and testing performed to date. This cost estimate is weighted heavily on the cost of sediment removal and disposal. The estimate for sediment removal and disposal is $3.3 million. On our cost estimate, this cost is broken down into "dredge impoundment and dewater material" at $440,000, "Stockpile, onsite hauling, loading for offsite disposal" at $491,000, "Haul to offsite Location" at $721,000, and "Disposal fees" of $1,642,000. This cost is shown on the preceding chart broken into two items, labeled "excavation, material removal" and "Construction" The other portions of the projects that are worthy of note are the engineering/materials testing during and prior to construction at $200,000, the water handling at approximately $110,000, and the actual removal of the dam at approximately $150,000.

Besides the sediment removal aspects of this budget proposal, the dam removal will leave piers of an upstream railroad bridge exposed to scour for the first time in 50 years. This will take some design and construction effort in order to insure that the piers are not undermined. Another unusual but costly component of the dam is the stabilization of the building adjacent to the dam and impoundment. The foundation of this building has not been previously exposed to the freeze thaw cycle since it was always below the ponds water surface. This foundation must be inspected and reinforced after the dam removal to insure that the building foundation is not negatively affected by the project.

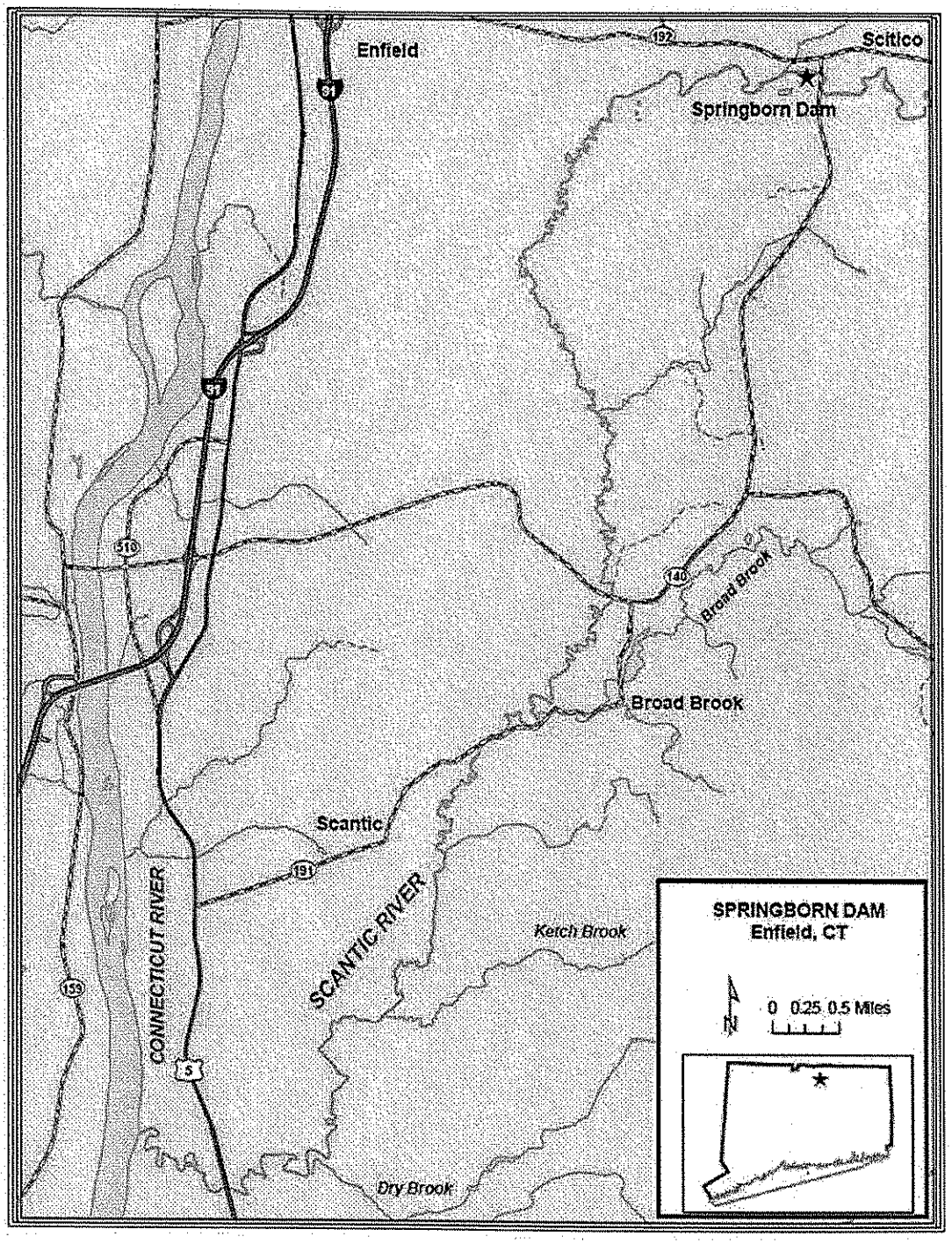
Oversight of contracting and engineering services will be provided by DEP within the Inland Water Resources Division of the Bureau of Water Protection and Land Reuse, also the applicant. For a project of this size, DEP also plans to contract for site management services to oversee day to day activities and to bring any change orders or other issues to the attention of DEP. DEP's Inland Fisheries Division will provide scientific and technical oversight, and be responsible for assessment and monitoring follow up, as described in this application.

Table 1. Summary of stream habitat affected by the removal of the Springborn Dam.

Note that estimates include only streams within Connecticut. It appears that the Scantic River is undammed for many miles within Massachusetts so the ecological benefit in terms of restored access to river miles would be greater than what is shown in this table. However, we have no information on barriers within Massachusetts so the data herein are offered as a conservative estimate.

Stream	Miles of available habitat when fish passage is achieved at Springborn and Somersville Pond dams
Scantic River (mainstem)	8.5 (not including considerable mileage in MA)
Wrights Brook	0.5
Abbey Brook	8
Gulf Stream	2.5
Hall Hill Brook	0.5
Gillette Brook (including Avery Brook)	1.5
Thrasher Brook (including Schanade Br.)	3.5
Wachaug Brook	3
Total	30

Figure 1. Location of the Springborn Dam in Enfield, CT



The head-of-tide is a short distance below the bottom edge of the map on the Connecticut River.

Figure 2. Aerial photo of the Springborn Dam, looking east (upstream).

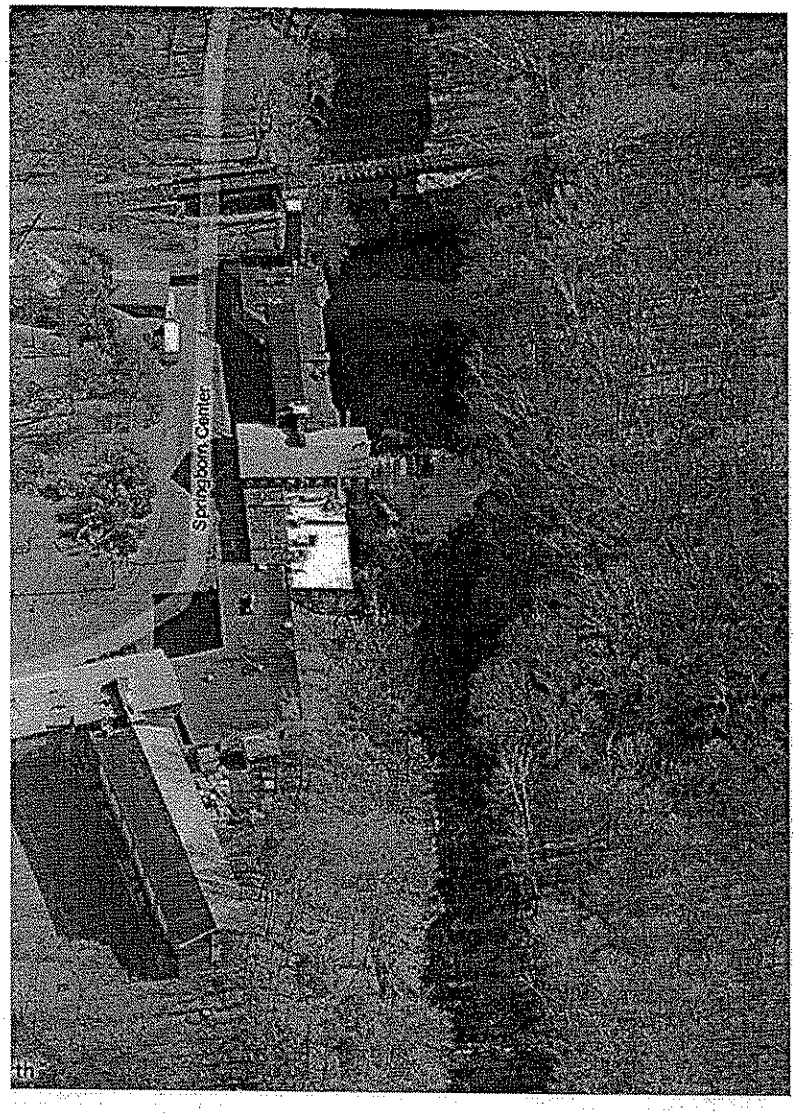
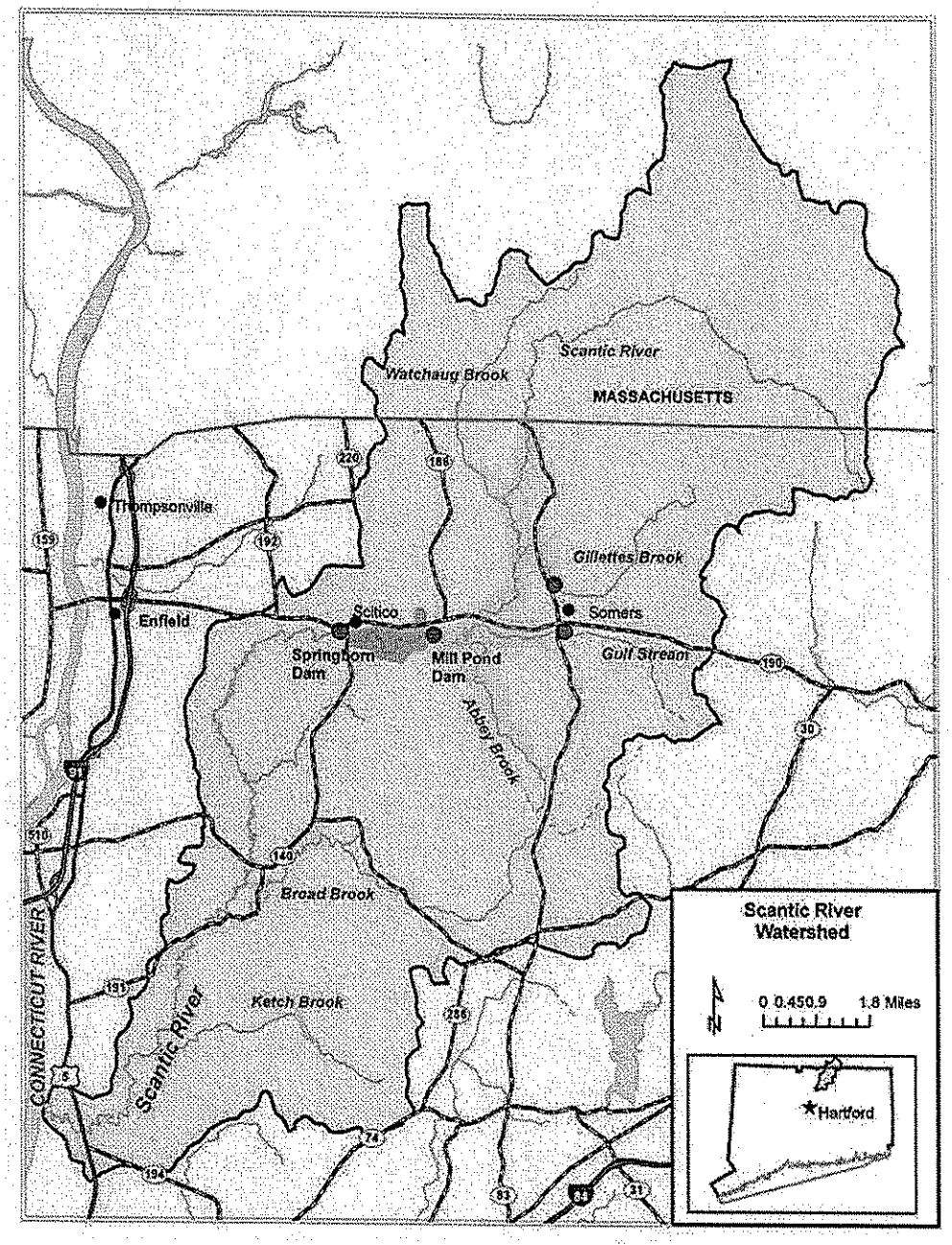


Figure 3. Depiction of the habitat in the Scantic River affected by the Springborn Dam Removal.



The red shaded portion of the map shows the stretch of the Scantic River that would be reconnected if the Springborn Dam is removed. That would allow the DEP to install a fishway at its Mill Pond Dam, which would in turn open up even more habitat, shown in the yellow shading. Note that the opened habitat may extend well into Masachusetts but information is lacking for the barriers in that state.

LETTERS OF SUPPORT

March 30, 2009

To Whom It May Concern

The Scantic River Watershed Association (SRWA) strongly supports the proposal to remove the Springborn Dam which currently impedes the flow of the Scantic River in Enfield, CT. The SRWA was revived in 2002 as an independent all volunteer entity whose motto is "We Speak for the River". The SRWA is involved In all aspects of the river from pollution control, riverbank protection, dam removal, fish and wildlife concerns and greenway planning along the entire length of the river.

The SRWA understands that the Connecticut Department of Environmental Protection (CT DEP) is applying for a NOAA ARRRA grant to completely remove this dam. The Scantic River Watershed Association would like to see the complete removal of the dam. The dam currently serves no function as it is not used for the production of electricity or power and is not used by STR INC. formally known as Springborn Labs.

This project is very important to the goals and concerns of the Association. The removal of the Springborn Dam is one the top priorities of the SRWA. Removing the dam will restore that part of the river back to a natural flowing river. It will open up the river and help to restore the traditional migratory fish runs such as shad, alewife and eels and will help with the natural reproducing fish found in the river such as trout.

The SRWA is the major sponsor of the Annual Scantic River Spring Splash Canoe & Kayak Race which was just run for the 18th annual time. The removal the dam will open up the river to boating for canoes and kayaks and add to the recreation in that area. Currently because of the dam there is a very large, long portage around the dam which requires carrying the boats up and down steep hills to access the river on the other side of the dam

The SRWA has worked with both the CT River Watershed Council and The CT DEP on the initial engineering studies that were conducted as to the feasibility of removing the dam. The SRWA is firmly in favor of going forward with removing the dam and will lend any assistance it can to seeing that this project takes place.

If the SRWA can be of any assistance you can call me at 860-745-9986 or email me at mdynia@yahoo.com.

Sincerely,

Michael Dynia
Chairman
Scantic River Watershed Association

Box 303, Somers, Connecticut 06071

CONNECTICUT RIVER WATERSHED COUNCIL
The River connects us.
15 Bank Row, Greenfield, MA 01301

March 31, 2009

To Whom It May Concern:

The Connecticut River Watershed Council (CRWC) strongly supports the application of the Connecticut Department of Environmental Protection (DEP) for a NOAA American Recovery and Reinvestment Act grant to remove the Springborn Dam on the Scantic River.

Since 1952, CRWC has been the principal citizen advocate for restoration and sustainable use in the four-state Connecticut River watershed. We have played a seminal role in defending the rivers of our watershed and we undertake actions to protect critical natural resources, promote public support for and involvement in river conservation, and increase public understanding and enjoyment of the Connecticut River watershed's rich diversity of natural and cultural resources.

Since 1997, CRWC has been working to reopen fish spawning habitats on tributaries to the Connecticut River. CRWC has overseen the installation of 7 fishways, 4 dam removals and one culvert replacement. The Scantic River Watershed Association brought in CRWC and American Rivers to create a partnership with DEP as DEP considered whether to restore or remove Springborn Dam. CRWC is familiar with the site and the issues, having been an active partner on this project and providing funding for engineering studies to augment DEP's feasibility study.

The Scantic River historically hosted native runs of the diadromous American shad, alewife, blueback herring, sea lamprey, and possibly Atlantic salmon as well as important resident species of fish including brook trout, white sucker and tessellated darter. All of these species were negatively impacted by the construction of dams during the Industrial Revolution but all except the Atlantic salmon persist in the river today and will benefit by the removal of the Springborn Dam. The stream below the dam supports a very high density of native brook trout that will be reconnected to upstream populations and restored usable habitat. The diadromous species and the tessellated darter will be able to transport larval life stages of listed mussel species upstream to habitat from which these mussels have been extirpated. It is unlikely that darters will be able to ascend any fishway that would be built at this dam.

CRWC agrees with DEP that complete removal of Springborn Dam is the best option for the site, best for the ecological restoration of the river, and the only one that will ensure restoration of diadromous fish runs to the river.

Sincerely,

Chelsea Gwyther
Executive Director

HEADQUARTERS: (413) 772-2020
FAX: (413) 772-2090
UPPER VALLEY: (802) 869-2792
E-MAIL: crwc@ctriver.org
LOWER VALLEY: (860) 704-0057
WEB: www.ctriver.org

STATE OF CONNECTICUT
EXECUTIVE CHAMBERS

M. JODI RELL
GOVERNOR

Mr. Peter R. Orszag, Director
Office of Management and Budget
Executive Office of the President
Washington, DC 20503

February 27, 2009

Dear Mr. Orszag:

Pursuant to Section 1607 of the American Recovery and Reinvestment Act of 2009, I hereby certify on behalf of the people of the State of Connecticut that we will request and accept funds provided by the American Recovery and Reinvestment Act of 2009 and use such funds to create jobs and promote economic growth in a manner that is in the best interests of the taxpayers of the State of Connecticut.

Sincerely,

M. Jodi Rell

M. Jodi Rell
Governor

STATE CAPITOL, HARTFORD, CONNECTICUT 06106
TEL: (860) 566-4840 • FAX: (860) 524-7396
www.ct.gov

GRANTS.GOV™

Grant Application Package

Opportunity Title:	Coastal and Marine Habitat Restoration Project Grants -
Offering Agency:	National Oceanic and Atmospheric Administration
CFDA Number:	11.463
CFDA Description:	Habitat Conservation
Opportunity Number:	NOAA-NMFS-HCPO-2009-2001709
Competition ID:	2141924
Opportunity Open Date:	03/06/2009
Opportunity Close Date:	04/06/2009
Agency Contact:	Craig Woolcott or Melanie Gange at (301) 713-0174, or by e-mail at Craig.Woolcott@noaa.gov or Melanie.Gange@noaa.gov. Prospective applicants are invited to contact NOAA staff before submitting an application to discuss

This electronic grants application is intended to be used to apply for the specific Federal funding opportunity referenced here.

If the Federal funding opportunity listed is not the opportunity for which you want to apply, close this application package by clicking on the "Cancel" button at the top of this screen. You will then need to locate the correct Federal funding opportunity, download its application and then apply.

This opportunity is only open to organizations, applicants who are submitting grant applications on behalf of a company, state, local or tribal government, academia, or other type of organization.

*** Application Filing Name:** Recovery Act - Springborn Dam Removal

Mandatory Documents

Move Form to Complete

Move Form to Delete

Mandatory Documents for Submission

- Application for Federal Assistance (SF-424)
- Project Narrative Attachment Form
- Budget Narrative Attachment Form
- CD511 Form
- Assurances for Non-Construction Programs (SF-42
- Budget Information for Non-Construction Program

Optional Documents

- Disclosure of Lobbying Activities (SF-LLL)

Move Form to Submission List

Move Form to Delete

Optional Documents for Submission

- Other Attachments Form

Instructions

1 Enter a name for the application in the Application Filing Name field.

- This application can be completed in its entirety offline; however, you will need to login to the Grants.gov website during the submission process.
- You can save your application at any time by clicking the "Save" button at the top of your screen.
- The "Save & Submit" button will not be functional until all required data fields in the application are completed and you clicked on the "Check Package for Errors" button and confirmed all data required data fields are completed.

2 Open and complete all of the documents listed in the "Mandatory Documents" box. Complete the SF-424 form first.

- It is recommended that the SF-424 form be the first form completed for the application package. Data entered on the SF-424 will populate data fields in other mandatory and optional forms and the user cannot enter data in these fields.

- The forms listed in the "Mandatory Documents" box and "Optional Documents" may be predefined forms, such as SF-424, forms where a document needs to be attached, such as the Project Narrative or a combination of both. "Mandatory Documents" are required for this application. "Optional Documents" can be used to provide additional support for this application or may be required for specific types of grant activity. Reference the application package instructions for more information regarding "Optional Documents".

- To open and complete a form, simply click on the form's name to select the item and then click on the => button. This will move the document to the appropriate "Documents for Submission" box and the form will be automatically added to your application package. To view the form, scroll down the screen or select the form name and click on the "Open Form" button to begin completing the required data fields. To remove a form/document from the "Documents for Submission" box, click the document name to select it, and then click the <= button. This will return the form/document to the "Mandatory Documents" or "Optional Documents" box.

- All documents listed in the "Mandatory Documents" box must be moved to the "Mandatory Documents for Submission" box. When you open a required form, the fields which must be completed are highlighted in yellow with a red border. Optional fields and completed fields are displayed in white. If you enter invalid or incomplete information in a field, you will receive an error message.

3 Click the "Save & Submit" button to submit your application to Grants.gov.

- Once you have properly completed all required documents and attached any required or optional documentation, save the completed application by clicking on the "Save" button.
- Click on the "Check Package for Errors" button to ensure that you have completed all required data fields. Correct any errors or if none are found, save the application package.
- The "Save & Submit" button will become active; click on the "Save & Submit" button to begin the application submission process.
- You will be taken to the applicant login page to enter your Grants.gov username and password. Follow all onscreen instructions for submission.

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424

Version 02

* 1. Type of Submission:
- [X] Preapplication
- [ ] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [X] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify)

* 3. Date Received: Completed by Grants.gov upon submission.

4. Applicant Identifier:

5a. Federal Entity Identifier:

* 5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: State of Connecticut

* b. Employer/Taxpayer Identification Number (EIN/TIN): 86-1154163

* c. Organizational DUNS: 108352811

d. Address:

* Street1: 79 Elm St.
Street2:
* City: Hartford
County:
* State: CT: Connecticut
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 06106

e. Organizational Unit:

Department Name: Environmental Protection

Division Name: Inland Fish

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Mr.
* First Name: William
Middle Name:
* Last Name: Hyatt
Suffix:

Title: Director

Organizational Affiliation:

* Telephone Number: 860-424-3487
Fax Number:

* Email: william.hyatt@ct.gov

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424

Version 02

9. Type of Applicant 1: Select Applicant Type:

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

National Oceanic and Atmospheric Administration

11. Catalog of Federal Domestic Assistance Number:

11.463

CFDA Title:

Habitat Conservation

*** 12. Funding Opportunity Number:**

NOAA-NMFS-HCPO-2009-2001709

* Title:

Coastal and Marine Habitat Restoration Project Grants - Recovery Act

13. Competition Identification Number:

2141924

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

*** 15. Descriptive Title of Applicant's Project:**

Recovery Act - Springborn Dam Removal on the Scantic River, Enfield, Connecticut

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

* a. Applicant: CT 1-5

* b. Program/Project: CT 1-5

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 07/01/2009

* b. End Date: 12/31/2010

18. Estimated Funding ($):

* a. Federal	3,000,000.00
* b. Applicant	0.00
* c. State	1,000,000.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	4,000,000.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .

☒ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☐ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)**

☐ Yes ☒ No Explanation

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: Ms. * First Name: Susan

Middle Name:

* Last Name: Frechette

Suffix:

* Title: Deputy Commissioner

* Telephone Number: 860-424-3005 Fax Number:

* Email: susan.frechette@ct.gov

* Signature of Authorized Representative: Completed by Grants.gov upon submission. * Date Signed: Completed by Grants.gov upon submission.

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424 Version 02

*** Applicant Federal Debt Delinquency Explanation**

The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.

Project Narrative File(s)

*** Mandatory Project Narrative File Filename:** Springborn summary and narrative.pdf

Add Mandatory Project Narrative File | Delete Mandatory Project Narrative File | View Mandatory Project Narrative File

To add more Project Narrative File attachments, please use the attachment buttons below.

Add Optional Project Narrative File | Delete Optional Project Narrative File | View Optional Project Narrative File

Budget Narrative File(s)

*** Mandatory Budget Narrative Filename:** Springborn Budget Narrative.pdf

Add Mandatory Budget Narrative | Delete Mandatory Budget Narrative | View Mandatory Budget Narrative

To add more Budget Narrative attachments, please use the attachment buttons below.

Add Optional Budget Narrative | Delete Optional Budget Narrative | View Optional Budget Narrative

FORM **CD-511**
(REV 1-05)

U.S. DEPARTMENT OF COMMERCE

CERTIFICATION REGARDING LOBBYING

Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, 'New Restrictions on Lobbying.' The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Commerce determines to award the covered transaction, grant, or cooperative agreement.

LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over $100,000 or a loan or loan guarantee over $150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying.' in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure occurring on or before October 23, 1996, and of not less than $11,000 and not more than $110,000 for each such failure occurring after October 23, 1996.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying,' in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure occurring on or before October 23, 1996, and of not less than $11,000 and not more than $110,000 for each such failure occurring after October 23, 1996.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

* NAME OF APPLICANT
State of Connecticut

* AWARD NUMBER

* PROJECT NAME
Recovery Act - Springborn Dam Removal

Prefix: Ms.
* First Name: Susan
Middle Name:
* Last Name: Frechette
Suffix:
* Title: Deputy Commissioner

* SIGNATURE: Completed by Grants.gov upon submission.

* DATE: Completed by Grants.gov upon submission.

OMB Approval No.: 4040-0007
Expiration Date: 07/30/2010

ASSURANCES - NON-CONSTRUCTION PROGRAMS

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C.§§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U. S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

* SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	* TITLE
Completed on submission to Grants.gov	Deputy Commissioner
* APPLICANT ORGANIZATION	* DATE SUBMITTED
State of Connecticut	Completed on submission to Grants.gov

OMB Approval No. 4040-0006
Expiration Date 07/30/2010

BUDGET INFORMATION - Non-Construction Programs

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Habitat Conservation	11.463	$	$	$ 3,000,000.00	$ 1,000,000.00	$ 4,000,000.00
2.						
3.						
4.						
5. Totals		$	$	$ 3,000,000.00	$ 1,000,000.00	$ 4,000,000.00

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY (1)	(2)	(3)	(4)	Total (5)
	Habitat Conservation				
a. Personnel	$	$	$	$	$
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual	3,000,000.00	1,000,000.00			4,000,000.00
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)	3,000,000.00	1,000,000.00			$ 4,000,000.00
j. Indirect Charges					$
k. TOTALS (sum of 6i and 6j)	$ 3,000,000.00	$ 1,000,000.00	$	$	$ 4,000,000.00
7. Program Income	$	$	$	$	$

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8. Habitat Conservation	$	$	$	$
9.				
10.				
11.				
12. TOTAL (sum of lines 8-11)	$	$	$	$

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$ 3,000,000.00	$ 750,000.00	$ 750,000.00	$ 750,000.00	$ 750,000.00
14. Non-Federal	$ 1,000,000.00	250,000.00	250,000.00	250,000.00	250,000.00
15. TOTAL (sum of lines 13 and 14)	$ 4,000,000.00	$ 1,000,000.00	$ 1,000,000.00	$ 1,000,000.00	$ 1,000,000.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (YEARS) (b)First	(c) Second	(d) Third	(e) Fourth
16. Habitat Conservation	$	$	$	$
17.				
18.				
19.				
20. TOTAL (sum of lines 16 - 19)	$	$	$	$

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:

22. Indirect Charges:

23. Remarks:

Other Attachment File(s)

*** Mandatory Other Attachment Filename:** Springborn Table figures supplemental (2).pdf

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